REMARKS/DISCUSSION OF ISSUES

By this Amendment, Applicants cancel claims 9 and 10 without disclaimer of the underlying subject matter or prejudice against subsequent presentation and prosecution. Applicants also amend claims 1, 7 and 8, and add new claims 11-22. Accordingly, claims 1-8 and 11-22 are pending in the application.

The Examiner is respectfully requested to acknowledge the claim for priority and receipt of certified copies of all the priority documents.

The Examiner is respectfully requested to state whether the drawings are acceptable.

Reexamination and reconsideration are respectfully requested in view of the following Remarks.

35 U.S.C. § 101

The Office Action rejects claims 1-7 and 9-10 under 35 U.S.C. § 101.

By this Amendment, Applicants cancel claims 9 and 10 without disclaimer of the underlying subject matter or prejudice against subsequent presentation and prosecution. So the rejections of claims 9-10 are deemed moot.

Applicants traverse the rejection of claim 7. The Office Action states that claim 7 is rejected because "the 'process' claims fail to tie with another statutory class . . . or transform underlying subject matter (article or materials) to a different state or thing."

Claim 7 is not a process claim.

Claim 7 is tied to (and indeed, claims) another statutory class.

Therefore, Applicants respectfully submit that the rejection of claim 7 under 35 U.S.C. § 101 is in error.

Without agreeing or acquiescing to the basis for rejection of claims 1-6 under 35 U.S.C. § 101, and simply n order to advance prosecution of this application to an early allowance, Applicants amend claim 1 to more clearly recite a particular apparatus (i.e., a decorrelator) that performs the claimed process.

Accordingly, for at least these reasons, Applicants respectfully request that the

rejections of claims 1-7 under 35 U.S.C. § 101 be withdrawn.

35 U.S.C. §§ 102 and 103

The Office Action rejects claims 1-4 and 7 under 35 U.S.C. § 102 over Irwan et al. U.S. Patent Application Publication 2002/0037086 ("Irwan"), and claims 5-6 under 35 U.S.C. § 103 over Irwan in view of Ali U.S. Patent 6,895,093 ("Ali").

Applicants respectfully traverse these rejections for at least the following reasons.

Claim 1

At the outset, the undersigned attorney thanks the Examiner for the courtesy of a brief telephonic interview on 3 February 2009. During that interview, the undersigned attorney requested clarification from the Examiner as to exactly what signals or parameters in Irwan he believes correspond to various specifically-recited signals and parameters of claim 1.

During that interview, the Examiner explained that he believes that Irwan discloses: (1) the combination of the L and R input signals in FIG. 2 corresponding to the recited input signal; (2) that the recited filtered signal is generated internal to Vector mutiplicator 7 in FIG. 2; (3) that the cross correlation ρ mentioned at the end of paragraph [0019] corresponds to the recited correlation parameter; (4) q(k) mentioned at the end of paragraph [0019] corresponds to the recited level parameter; and (5) the signals W_ℓ and W_r output by Direction sensor 4 in FIG. 2 correspond to the recited first and second output signals.

Applicants respectfully disagree for at least the following reasons.

As recited in claim 1, the method includes applying an input signal and a filtered signal to a transformation circuit and performing a matrixing operation on the input signal and the filtered signal to transform the input signal and the filtered signal into first and second output signals.

As noted above, the Examiner states that the recited filtered signal is generated internal to Vector mutiplicator 7 in FIG. 2 of Irwan, and the signals W_ℓ and

W_r output by Direction sensor 4 in FIG. 2 correspond to the recited first and second output signals.

However, it is apparent from inspection of FIG. 2 of Irwan that nothing from Vector mutiplicator 7 (including any supposed filtered signal generated thereby) is transformed in any way by any matrixing operation to generate the signals W_ℓ and W_r output by Direction sensor 4, which in fact are supplied as input signals to Vector mutiplicator 7!

Therefore, Irwan cannot disclose the method of claim 1.

Furthermore, claim 1 recites performing a matrixing operation on the input signal and the filtered signal to transform the input signal and the filtered signal into the first and second output signals, where the matrixing operation employs a correlation parameter and a level parameter.

Again, the Examiner states that the signals W_ℓ and W_r output by Direction sensor 4 in FIG. 2 correspond to the recited first and second output signals, and that the cross correlation ρ mentioned at the end of paragraph [0019] corresponds to the recited correlation parameter.

However, it is apparent from inspection of FIG. 2 of Irwan that the cross correlation ρ mentioned at the end of paragraph [0019], which is generated by Stereo magnitude determining means 2 of FIG. 2, is not supplied to Direction sensor 4, and therefore cannot be employed in any matrixing operation on the input signal (L and R) and the filtered signal to transform the input signal and the filtered signal into the first and second output signals W_ℓ and W_r output by Direction sensor 4.

Therefore, again, Irwan cannot disclose the method of claim 1.

Applicants respectfully submit that there are many other inconsistencies in the Office Action's attempt to contort FIG. 2 of Irwan to somehow try to make it read onto claim 1. However, the two deficiencies mentioned above should be more than sufficient to illustrate the problem. Applicants respectfully submit that no possible interpretation of the elements in FIG. 2 of Irwan would possible produce the method of claim 1.

Accordingly, for at least these reasons, Applicants respectfully submit that claim 1 is patentable over Irwan.

Claims 2-4

Claims 2-6 depend from claim 1 and are deemed patentable for at least the reason set forth above with respect to claim 1.

Claims 7-8

Among other things, the devices of claims 7 and 8 each include a transformation circuit for transforming an input signal and a filtered signal by a matrixing operation into first and second output signals, where the matrixing operation depends on the correlation parameter and the level parameter. For similar reasons to those set forth above with respect to claim 1, Applicants respectfully submit that no possible interpretation of the elements in FIG. 2 of Irwan would possible a device including such a transformation circuit.

Accordingly, for at least these reasons, Applicants respectfully submit that claims 7 and 8 are patentable over Irwan.

Claims 5-6

Claims 5-6 depend from claim 1. Applicants respectfully submit that Ali does not remedy the shortcomings of Irwan as set forth above with respect to claim 1. Accordingly, claims 5-6 and are deemed patentable for at least the reasons set forth above with respect to claim 1.

NEW CLAIMS 11-22

Claims 11-19

New claims 11-19 depend from claims 1 and 7 and are deemed patentable over the cited art for at least the reasons set forth above with respect to claims 1 and 7, and for the various novel features recited therein.

Claims 20-22

Among other things, the methods of claims 20-22 each include employing a processing means to perform a matrixing operation on an input signal and a filtered signal to transform the input signal and the filtered signal into the first and second

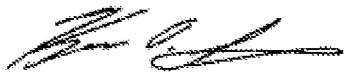
output signals, where the matrixing operation employs the correlation parameter and the level parameter. For similar reasons to those set forth above with respect to claim 1, Applicants respectfully submit that the prior art does not disclose any method that includes this combination of features.

CONCLUSION

In view of the foregoing explanations, Applicants respectfully request that the Examiner reconsider and reexamine the present application, allow claims 1-8 and 11-22 and pass the application to issue. In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact Kenneth D. Springer (Reg. No. 39,843) at (571) 283.0720 to discuss these matters.

Respectfully submitted,

VOLENTINE & WHITT



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